

[0015] FIG. 2 is a front and a side perspective view of an extended form of a first preferred embodiment of the present invention showing polyester layers applied to electronic circuitry and a plurality of panels comprising the telephone, wherein the first panel is printed with a keypad, the second, third, fourth, and fifth panels are printed with the electronic circuitry (the circuitry being depicted only schematically herein), and the sixth panel is a magnet assembly;

[0016] FIG. 3 is a front elevational view of the extended form of the telephone and the polyester layers cut-away and illustrating the schematic representation of the electronic circuitry;

[0017] FIG. 4 is a front perspective view showing the telephone folded "accordion" style and of a second preferred embodiment illustrating a cardstock layer coated with a repositionable adhesive and a silicone release layer positioned on the repositionable adhesive;

[0018] FIG. 5 is a front elevational view of the extended form of the telephone showing an alternative printing option, wherein a front face of the first, second, and fourth panels is printed;

[0019] FIG. 6 is a rear elevational view showing the alternative printing option illustrated in FIG. 5 wherein a back face of the second and fourth panels is printed;

[0020] FIG. 7 is a front elevational view showing three telephones printed on a carrier sheet and having lines of weakness surrounding the telephones for removal of the telephone by a user of the present invention;

[0021] FIG. 8 is a front and a side perspective view of the telephone folded "around itself";

[0022] FIG. 9 is a front elevational view of the extended form of the telephone showing the panels to be printed when the telephone is to be folded "around itself," as illustrated in FIG. 8;

[0023] FIG. 10 is a cross-sectional view showing the telephone folded "around itself";

[0024] FIG. 11 is a front and a side perspective view of an alternative electronic communication device, particularly a radio frequency identification ("RFID") tag showing a corner of the RFID tag pulled away to illustrate multiple layers.

DETAILED DESCRIPTION

[0025] The invention hereof is directed to removable mounting or coupling of an electronic communication device 5. Such devices 5 permit wireless receipt, and preferably also transmission, of signals for voice or data transmission. The invention hereof is particularly useful in connection with disposable electronic communication devices and one such device 5 is a disposable telephone 10, as shown in FIGS. 1-10. Such a disposable telephone 10 is hereby enabled to be removably coupled to a surface in accordance with a first and a second preferred embodiment of the present invention. However, it is to be understood that the coupling structure and method as described herein may be readily employed on other electronic communication devices, such as radios, pagers, and transponders having wireless telecommunication capability. As illustrated in FIGS. 2 and 3, the disposable telephone 10 is broadly comprised of a body 12 made of a dielectric material printed

with conductive ink that diagrams an electronic circuit 13; a power source 14; an earphone 16; a microphone 18; and a magnet assembly 20, as illustrated in FIGS. 2 and 3, for positioning the telephone 10 on the surface.

[0026] The body 12, in an assembled condition, has a front face 12a and a back face 12b, as illustrated in FIGS. 1 and 10. The body 12 is preferably composed of cardstock, but may be any dielectric material, such as polypropylene or paper. The cardstock is preferably 3 mil-4 mil in thickness, but the thickness may range between 2 mil and 10 mil. As is known in the art, a dielectric material may be printed with a conductive ink for providing the electronic circuit diagram that includes conductors and other components of a telephone's circuitry, as illustrated in FIG. 3. In the preferred embodiments, a length of cardstock is divided into a plurality of panels, preferably a first panel 22, a second panel 24, a third panel 26, a fourth panel 28, a fifth panel 30, and a sixth panel 32, as illustrated in FIG. 2, each of the panels having respective front faces 22a, 24a, 26a, 28a, 30a, 32a, as illustrated in FIG. 2, and respective back faces 22b, 24b, 26b, 28b, 30b, 32b, as illustrated in FIG. 6. The front face 22a of the first panel 22 is printed with a keypad 34. The front face 24a, 26a, 28a, 30a of the second, third, fourth, and fifth panels 24, 26, 28, 30 of the cardstock is printed with conductive ink arranged so as to diagram an electronic circuit 13 for telephone operation, as illustrated in FIGS. 2-4. Those ordinarily skilled in the art will appreciate that the circuitry 13 has only been depicted schematically herein (e.g., see FIGS. 2-7 and 9). That is, the schematic representations of the circuitry 13 have principally been provided for illustrative purposes only (e.g. to depict the general location of the circuitry, the manner in which it is formed, etc.). Suitable telephone circuitry 13 for a disposable wireless telephone 10 is described in U.S. Pat. Nos. 5,845,218 and 5,875,393, both assigned to Randice-Lisa Altschul and hereby incorporated by reference. The panels 22, 24, 26, 28, 30, 32 are joined by a thin webbing material 36, preferably polypropylene, as best illustrated in FIG. 9. The panels 22, 24, 26, 28, 30, 32 are adapted to be folded onto each other such that the electronic circuitry 13 is precisely aligned. Optimal folding techniques and securement of the panels 22, 24, 26, 28, 30, 32 are described below.

[0027] The power source 14 for the telephone 10 is preferably two, but at least one, batteries preferably affixed to the fifth panel 30, as illustrated in FIG. 2. The power source 14 is preferably a small, thin battery, such as a disk battery, a flat battery, a pouch battery, or a paper battery. Alternatively, the power source 14 may be any power source suitable for small, disposable electronic communication devices. The power source 14 may also be solar power or a remote housing including a battery. Corresponding areas of the second, third, and fourth panels 24, 26, 28 are removed or cut out where the power source 14 will be positioned when the body 12 is folded, such that when folded, the body 12 is substantially flat with no obtrusions.

[0028] The earphone 16 and the microphone 18 are preferably secured to the first panel 22 after the body 12 is printed. Once folded, the earphone 16 is preferably secured to an upper portion of the telephone 10 and preferably offset to the right side of the telephone 10. The microphone 18 is preferably secured to a lower portion of the telephone 10 and preferably offset to the left side of the telephone 10. The earphone 16 and the microphone 18 may also be remotely